

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: RED EAGLE POND	Lake Area (ha):	2.75
Town: ALBANY	Maximum depth (m):	2.5
County: Carroll	Mean depth (m):	0.8
River Basin: Saco	Volume (m ³):	22000
Latitude: 43°59'36" N	Relative depth:	1.3
Longitude: 71°09'22" W	Shore configuration:	1.84
Elevation (ft): 527	Areal water load (m/yr):	165.5
Shore length (m): 1080	Flushing rate (yr ⁻¹):	208.0
Watershed area (ha): 747.0	P retention coeff.:	0.12
% watershed ponded: 0.0	Lake type:	natural

<u>BIOLOGICAL:</u>		9 January 1997	17 June 1996
DOM. PHYTOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANT	DINOBRYON 75%
	#2		SYNURA 15%
	#3		
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			2.20
DOM. ZOOPLANKTON (% TOTAL)	#1	NONE OBSERVED	CALANOID COPEPOD 43%
	#2		GASTROPUS 26%
	#3		BOSMINA 18%
ROTIFERS/LITER		<1	51
MICROCRUSTACEA/LITER		<1	140
ZOOPLANKTON ABUNDANCE (#/L)		<1	200
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			2.5 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		6.3	7.0
BACTERIA (E. coli, #/100 ml)	#1		< 1
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: RED EAGLE POND

Town: ALBANY

	9 January 1997		17 June 1996		
DEPTH (m)	1.0	2.0	1.0		2.0
pH (units)	5.6	5.6	6.5		6.2
A.N.C. (Alkalinity)	4.6	4.5	4.8		4.4
NITRATE NITROGEN	0.08	0.06	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN			0.11		0.21
TOTAL PHOSPHORUS	0.007	0.008	0.007		0.007
CONDUCTIVITY (μ mhos/cm)	36.2	40.7	38.5		39.2
APPARENT COLOR (cpu)			40		40
MAGNESIUM			0.23		
CALCIUM			2.2		
SODIUM			4.4		
POTASSIUM			0.43		
CHLORIDE	4	6	5		5
SULFATE	3	3			
TN : TP			16		30
CALCITE SATURATION INDEX			3.8		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1996

D.O. S.D. PLANT CHL TOTAL CLASS

**	2	1	0	3	Oligo.
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COMMENTS:

1. Red Eagle Pond is located in the White Mountain National Forest adjacent to the north side of Dugway Road, which leads to the Kancamagus Highway.
2. This is a shallow, lightly tea-colored, mildly acidic, warm-water fishery pond surrounded by hemlock, white pine and red maple. It was sampled jointly with the NH Fish and Game Department.
3. Motor boats are prohibited.
4. The plant abundant rating of *scattered* reflects emergent and floating-leaf growths; submerged growth was *common*.
5. Three painted turtles and a great blue heron were observed.

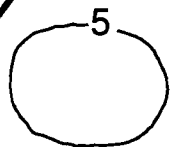
Red Eagle Pond

Albany



5 foot depth contour

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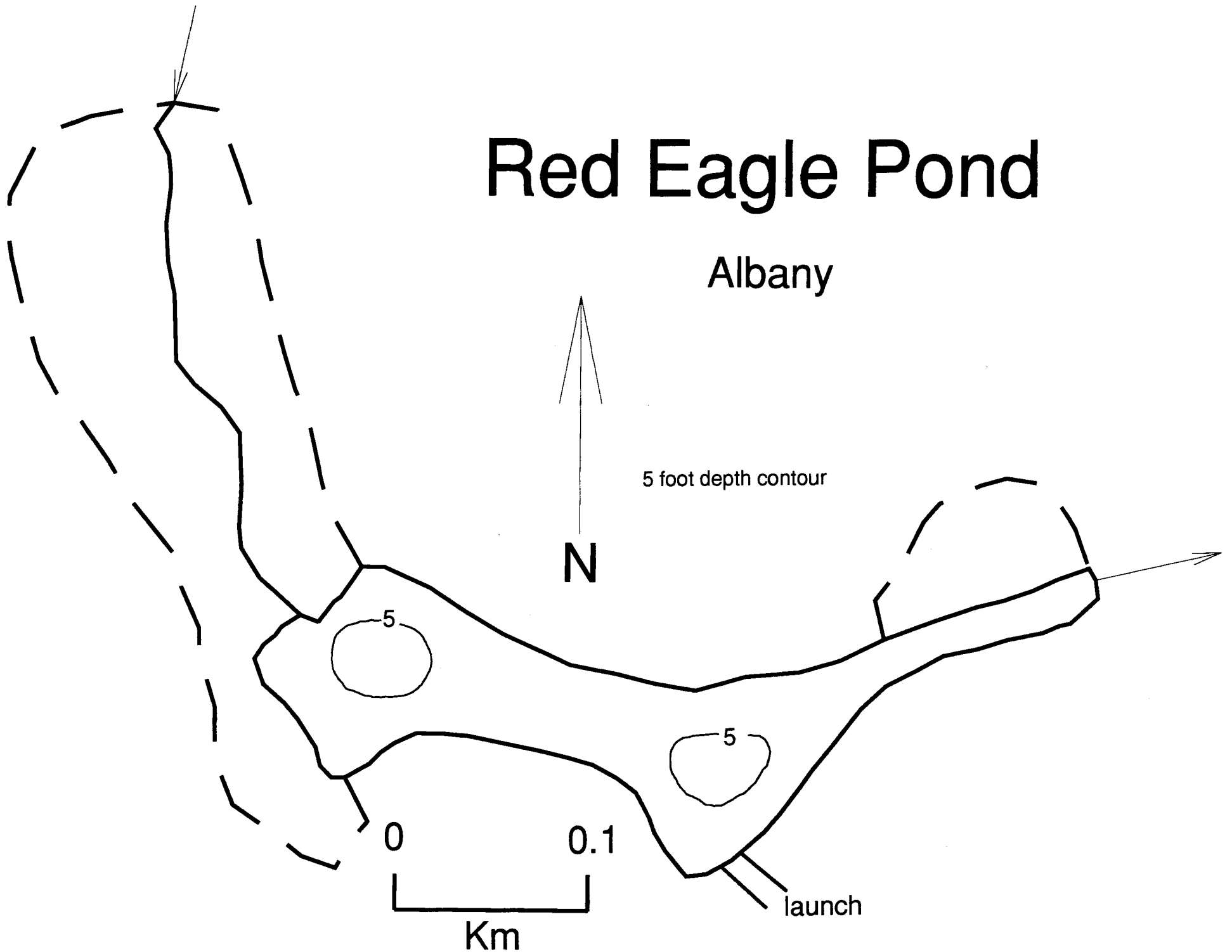
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0.1



Km

launch



LAKE: RED EAGLE POND
DATE: 06/17/96

WEATHER: SUNNY, NO CLOUDS

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SECCHI DISK (m):    2.5 VOB      COMMENTS:
BOTTOM DEPTH (m):   2.5
TIME: 1120

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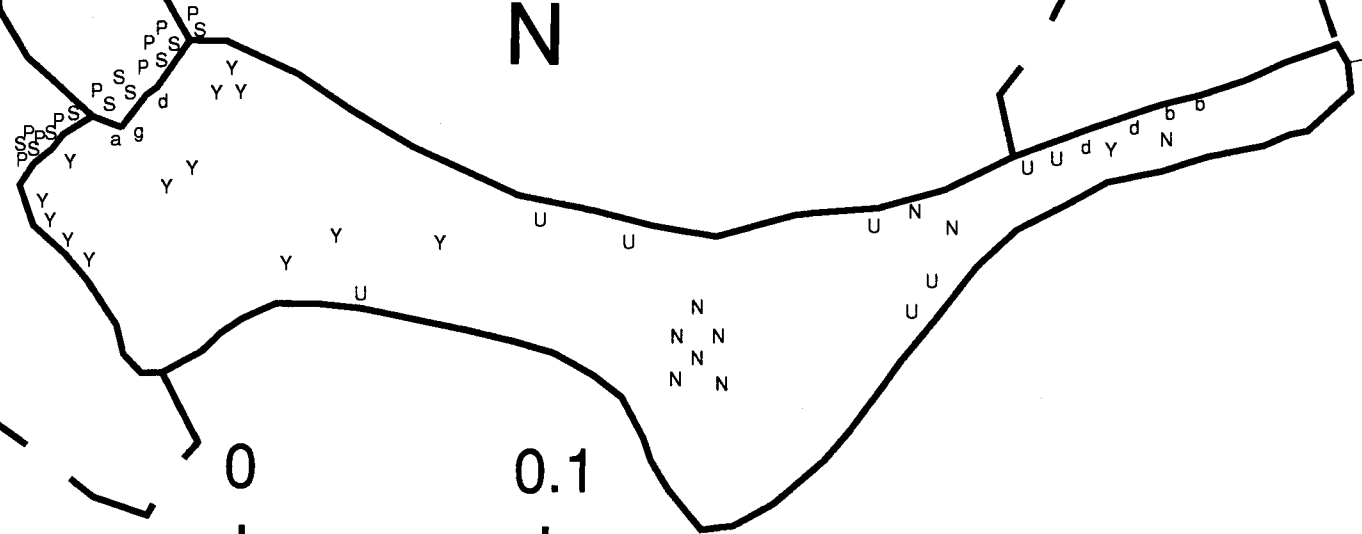
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Red Eagle Pond

Albany



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0 0.1
Km

AQUATIC PLANT SURVEY

LAKE: RED EAGLE POND

TOWN: ALBANY

DATE: 06/17/96

[illegible]

OVERALL ABUNDANCE: Scattered

GENERAL OBSERVATIONS:

1. The inlet stream was a boggy area with sundew and pitcher-plants.
2. The bottom in some areas was covered with sterile, thread-like leaves which were themselves covered with filamentous algae.
3. Sweet gale was very common along the shoreline.
4. Freshwater sponges and purple Iris were scattered along the shore but are not depicted on the map.
5. Sundew and pitcher-plants were located along other shoreline areas in addition to the inlet bog, but are not depicted on the map.